

ABSTRACT OF THE DISCLOSURE

A water softening method and corresponding apparatus in which a determination is made whether a valid regeneration in an operational cycle has occurred, including the steps of providing a reference cell in a water tank and a spaced sensing cell in the water tank, sensing the impedance difference of the 5 solution in the water tank between the reference cell and the sensor cell, if the impedance difference is one of a first, a second and a third state, determining whether a maximum rinse timer has timed out, if the maximum rinse timer has timed out, determining whether the maximum time limit was a preset time period, if the preset time period was reached, then triggering an alarm signal indicating 10 that a valid regeneration did not occur.